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#25/Reply  
Brief

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of : John B. Hoeflich, et al.  
For : **HIGHER OVERALL FLEX GOLF SHAFT**  
Serial No. : 08/787,745  
Filed : January 24, 1997  
Examiner : S. Blau  
Art Unit : 3711  
Attorney Docket No. : HDG 2 012-1

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Cleveland, Ohio 44114-2518  
May 29, 2001

**REPLY BRIEF UNDER 37 C.F.R. §1.193(b)**

Assistant Commissioner for Patents  
Washington D. C. 20231

Dear Sir:

This is a Reply Brief (in triplicate) to the Examiner's Answer  
mailed March 28, 2001.

**REMARKS**

Turning to the Examiner's Response to Argument, the Examiner disagrees with Appellants' argument that under MPEP 2131.03 it is improper to reject claims 1 through 3 under 35 U.S.C. §102(b) as being anticipated by Akatsuka '450 because the claimed subject matter is not disclosed within the Akatsuka reference with "sufficient specificity." More particularly, the Examiner contends that Akatsuka does provide a specific example of a shaft having butt and tip diameters within the claimed ranges. However, a reading of Akatsuka reveals that two specific examples are

disclosed, neither of which have butt and tip diameters within the claimed ranges. More particularly, Akatsuka '450 provides a first specific example of a golf shaft having an outside butt diameter of .591 inches, which is outside the claimed range of .400-.540 inches and an outside tip diameter of .335 inches, which is at the bottom of the claimed range of .330-.400 inches (see Akatsuka specification, col. 8, lines 34-37). At column 9, lines 18-21, Akatsuka discloses a second specific example of a golf shaft having an outside tip diameter of .189 inches, which is far outside of the claimed range, and an outside butt diameter of .524 inches, which is at the very top of the claimed range. Therefore, Akatsuka '450 does not provide a specific example falling within the claimed ranges. This fact coupled with the overly broad ranges disclosed in Akatsuka '450 supports a finding that Akatsuka fails to disclose the claimed subject matter with sufficient specificity to constitute an anticipation of the claims.

Turning next to the Examiner's conclusion that Akatsuka '450 discloses the claimed subject matter with sufficient specificity because "golfers come in all strengths and sizes and require different flexibilities and dimensions," Appellants contend that the Examiner has failed to consider the language of MPEP 2131.03. More particularly, MPEP 2131.03 instructs that, "[i]f the claims are directed to a narrow range, the reference teaches a broad range, and there is evidence of unexpected results within the claim narrow range, ..., it may be reasonable to conclude that the narrow range is not disclosed with 'sufficient specificity' to constitute an anticipation of the claims." As evidenced by the Olsavsky Affidavit at paragraph 10, Akatsuka '450 discloses ranges which are exceptionally broad in comparison to those practiced in the industry. Further, there is evidence of unexpected results within the claimed range, namely, a higher kick point and a more uniform bend profile for the golf shaft (see Figures 10 and 11 of the specification; Olsavsky Affidavit at paragraph 7). The Examiner ignores the Olsavsky Affidavit and simply contends that the majority of golfers would not benefit from the two specific examples provided in Akatsuka '450 because there is

a great variation between golfers. In essence, the Examiner places more importance on his own unsupported conclusions than on the affidavit of skilled artisan Olsavsky.

While no rejection is made based on Meredith 5,018,735, the Examiner makes reference to Meredith in paragraph 12, apparently in an attempt to compensate for the inadequacies of the references already cited. While Appellants do not believe that the Examiner's passing mention of Meredith rises to the level of a new rejection, Appellants will comment nonetheless. According to the Examiner, Meredith discusses the practice of having a thick wall thickness for a tip end and a thin wall thickness for a butt end of a shaft in order to adjust shaft flexibility. Appellants contend that the Meredith reference, which has not been cited prior to the Examiner's Answer, adds nothing to the deficiencies of Akatsuka '450. More particularly, nothing in the presently claimed invention requires a thicker wall thickness at a tip end and a thinner wall thickness at a butt end. If anything, the last minute inclusion of Meredith provides further support for Appellants' contention that the presently claimed invention distinguishes patentably over the references of record.

Turning now to the Examiner's Argument that the claimed invention is unobvious over Akatsuka in view of Hogan and Iwanaga because Iwanaga teaches having a kick point above a center point of a shaft for long shafts as well as short shafts, Appellants assert that neither Akatsuka '450 nor Iwanaga teach varying the flexibility and kick point of a golf shaft by varying the respective butt and tip diameters. In fact, at paragraph 18 of the Examiner's Answer, the Examiner acknowledges that "Iwanaga was not used to show how to form a kick point."

Further, the Examiner acknowledges that Iwanaga adds nothing to the deficiencies of Akatsuka by agreeing with Appellants' argument that Iwanaga does not teach a shaft of between 35-47 inches and a kick point above a center point of the shaft. In fact, at column 5, lines 30-31, Iwanaga teaches "the longer of the shafts is more flexible on the head

side than on the grip side to give a lower kick point.” The Examiner simply states that Iwanaga teaches the advantage of having a kick point above a center point of a shaft for long shafts without citing any particular reference to such a teaching.

In addition, the Examiner appears to ignore the limitation in each of the claims at issue that the golf shaft taper without intervening discontinuities from the butt end to the tip end. Iwanaga teaches that a kick point of a golf club shaft may be located above the center point of the shaft for shorter clubs by introducing a discontinuity in the filament winding angle at an intermediate section of the shaft. In addition to failing to meet a necessary limitation in the claims at issue, the introduction of an intentional discontinuity in the Iwanaga shaft leaves it improperly combinable with Akatsuka '450 because it destroys the intended function of Akatsuka, i.e., a light weight golf shaft of high mechanical strengths having constant filament winding angles of  $+45^{\circ}$  and  $-45^{\circ}$ .

Turning next to the Examiner's conclusion that claim 17 is unpatentable over Akatsuka '450 in view of Hogan and Iwanaga, and further in view of Huang because Huang states that the longitudinal profile of the grip and shaft should correspond to a player's hand, size and shape, Appellants contend that there is no suggestion to narrow the butt end shaft diameter in Huang. Rather, at column 1, lines 26-30, Huang states “[i]t is therefore desirable to be able to vary the longitudinal profile of a golf club grip to meet the desires of any particular golfer, i.e., a person with small hands usually obtains better results with a grip of reduced diameter as compared to a person with large hands.” (Emphasis added.) Appellants reaffirm that those of ordinary skill in the art adjust the grip (i.e., the elastomeric fitting which sheaths the shaft) diameter, rather than the shaft diameter, in order to accommodate players with hands of differing sizes (see Olsavsky Declaration, paragraph 12). In addition, the Examiner fails to address Appellants' Argument that claim 17 requires a golf club shaft with a butt diameter of between .450 and .475 inches, which is completely

outside the range of .492-.728 inches disclosed in Akatsuka '450. Therefore, claim 17 distinguishes patentably over the references of record.

Finally, with regard to the Examiner's argument that Akatsuka '450 discloses "varying a flexibility of a shaft by varying the shaft diameter and wall thickness," Appellants have invited the Examiner to point out this specific teaching within the Akatsuka reference, having failed to identify its origin. Appellants contend that Akatsuka teaches a light weight golf club shaft, i.e., a shaft having an average weight of 1.4 grams per inch or less, having high mechanical strengths. Nowhere does Akatsuka teach varying flexibility of a shaft by varying the shaft diameter and wall thickness. In fact, the only mention of shaft dimensions in Akatsuka is found in the final paragraph of column 5, in which overly broad shaft dimensions (see Olsavsky Affidavit) are provided.

In short, the Examiner identified a reference (Akatsuka '450) teaching butt and tip diameters, which by nothing more than their extraordinary breadth, encompass Appellants' significantly narrower claimed ranges. Akatsuka '450 provides no consideration to modifying the flex point of a golf shaft. The remainder of the Examiner's rationale attempts to justify a selection of Appellants' claimed shaft dimensions from the Akatsuka '450 dimensions without any concept that the tailoring of these dimensions could have the claimed effect.

In view of the above, Appellants respectfully request the Board of Appeals to reverse the Examiner's rejections.

Respectfully submitted,

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**CERTIFICATE OF MAILING**

I hereby certify that this **REPLY BRIEF** is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231, on May 29, 2001.

By: \_\_\_\_\_

